UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,248	02/26/2002	David D. Rowley	23415-013	1772

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EXAMINER
SHINGLES, KRISTIE D

ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	10/082,248	ROWLEY ET AL.
Office Action Summary	Examiner	Art Unit	
	Kristie Shingles	2141	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>20 March 2006</u>.

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-26* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

In light of Applicant's amendments filed 1/19/2006 with amended claims 1, 4-6, 21 and 23-25

and new claim 26; claims 1-26 are pending.

Response to Arguments

1.   Applicant's arguments, (see Pre-Appeal Brief Request for Review Remarks, pages 2-4),

filed 3/20/2006, with respect to the rejection of claims 1, 7, 11, 16 and 21 under 35 U.S.C. 103(a)

have been fully considered and are persuasive.   Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground of rejection is made in view of *Alcorn et al*

al (USPN 6,988,138).

Claim Rejections - 35 USC § 112, second paragraph

2.   **Per Claims 1, 4-6, 21 and 23-25**, the correction to the claim language has been accepted

by the Examiner. The rejection under 35 U.S.C. 112, second paragraph, is therefore withdrawn.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   <u>Claims 1-26</u> are rejected under 35 U.S.C. 103(a) as being unpatentable over *Alcorn et al*

(USPN 6,988,138) in view of *Johnston et al* [US 2002/0103882].

  a.   **Per claims 1 and 21** (differ only by statutory subject matter), *Alcorn et al* teach a

computer implemented method for enabling a user to perform an exercise remotely using a client

system, comprising:

- receiving a request from the user to connect to a remote server, wherein the request includes user information (Figure 39, col.4 lines 19-22 and 52-53);

- accessing a course database to determine one or more courses associated with the user, based on the user information (col.4 lines 52-56, col.7 lines 43-51, col.9 lines 46-64);

- transmitting a list of courses associated with the user to the client system, wherein each course in the list of courses includes one or more exercises (col.4 lines 19-45 and 52-59, col.10 lines 15-23; user is provided with access list to courses associated with the user, wherein course files of the courses contain assignment/assessment files);

- receiving data indicating selection of a user-selected course from the list of courses (col.4 lines 60-63; provision for user to select a course hyperlink);

- accessing the course database to determine the one or more exercises associated with the selected course (col.4 lines 60-67); and

- transmitting a list of exercises, associated with the selected course from the server to the client system, whereby the client system displays the list of exercises to the user (col.4 lines 19-45 and 60-67, col.14 lines 8-44; course assignments from the assignment link of the selected course are transmitted to the user, wherein each listed assignment can be linked to web pages that contain the complete details of the particular assignment).

  Although *Alcorn et al* teach that each assignment can be linked to web pages that

contain the complete details of the assignments (col.14 lines 29-34) and virtual classrooms

(col.19 lines 16-51). Yet *Alcorn et al* fail to explicitly teach virtual machines. However *Johnston*

et al teach users of client devices selecting an exercise, wherein the exercises are associated with

virtual machines [paragraphs 0031-0035, 0040-0045 and 0047-0050]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Alcorn et al* and *Johnston et al* for the purpose of providing a virtual environment for implementing the remote student-access of exercise; because it would provision interactive communication for accessing exercises in one or more simultaneous execution environments over the Internet.

b.   **Claims 7, 11 and 16** contain limitations that are substantially similar to claims 1 and 21 and are therefore rejected under the same basis.

c.   **Per claim 2**, *Alcorn et al* and *Johnston et al* teach the method of claim 1, *Johnston et al* further teach wherein the client system comprises a web browser and a remote display viewer [paragraphs 0055-0056; *Alcorn et al*: col.7 line 58-col.8 line 5, col.19 lines 16-51].

d.   **Per claim 3**, *Alcorn et al* and *Johnston et al* teach the method of claim 1, *Johnston et al* further teach wherein the act of launching the one or more virtual machines comprises step of sending a message to a virtual machine launcher, wherein the message includes an identifier that identifies the particular exercise [paragraphs 0040-0050, 0060-0067 and 0071-0073; *Alcorn et al*: col.14 lines 29-34].

e.   **Claim 22** is substantially equivalent to claim 3 and is therefore rejected under the same basis.

f.   **Per claims 4,** *Alcorn et al* and *Johnston et al* teach the method of claim 1, *Johnston et al* further teach wherein the data transmitted to the client system further directs the client system to display to the user one or more selectable icons or links, wherein each one of the selectable icons or links is associated with a unique one of the one or more virtual machines that are associated with the particular exercise [paragraphs 0040-0042, 0063 and 0069-0071—user activates link for requesting a virtual environment associated with the DLUs and virtual machines; *Alcorn et al*: col.14 lines 29-34].

g.   **Claims 8, 15 and 23** are substantially equivalent to claim 4 and are therefore rejected under the same basis.

h.   **Per claim 5,** *Alcorn et al* and *Johnston et al* teach the method of claim 4, *Johnston et al* further teach further comprising receiving at the server data transmitted from the client system, wherein the data indicates that the user activated one of the selectable icons or links [paragraph 0042—user activates link for requesting a virtual environment; *Alcorn et al*: col.14 lines 29-34].

i.   **Claim 24** is substantially equivalent to claim 5 and is therefore rejected under the same basis.

j.   **Per claim 6,** *Alcorn et al* and *Johnston et al* teach the method of claim 5, *Johnston et al* further teach further comprising: determining the virtual machine associated with the activated icon or link, wherein the virtual machine has an operating system that generates a user interface; and transmitting to the client system the user interface, wherein the client system displays the user interface to the student, thereby enabling the user to interact with the operating system [paragraphs 0040-0046, 0048-0051 and 0055-0056].

k.   **Claim 25** is substantially equivalent to claim 6 and is therefore rejected under the same basis.

l.   **Claim 9** is substantially equivalent to claims 4-6 and is therefore rejected under the same basis.

m.   **Per claim 10,** *Alcorn et al* and *Johnston et al* teach method of claim 7, *Johnston et al* further teach further comprising the step of receiving data transmitted from the server after transmitting the exercise identifier to the server, wherein the viewer establishes the connection with the remote display server in response to the reception of the data [paragraphs 0040-0050 and 0054-0064].

n.   **Per claim 12,** *Alcorn et al* and *Johnston et al* teach the system of claim 11, *Johnston et al* wherein the first computer system further comprises a back-end server, wherein each one of the virtual machine launchers registers with the back-end server [paragraphs 0034-0039, 0044-0050, 0053-0065 and Figure 6; virtual machines are registered with DLUs and DLM].

o.   **Per claim 13,** *Alcorn et al* and *Johnston et al* teach the system of claim 11, *Johnston et al* further teach wherein in selecting one of the plurality of second computer systems, the front-end server determines which of the plurality of second computer systems are available and selects one of the available second computer systems [Figure 6, paragraphs 0044-0053 and 0059-0069].

p. **Per claim 14,** *Alcorn et al* and *Johnston et al* teach the system of claim 11, *Johnston et al* further teach wherein, after receiving the exercise identifier transmitted from the front-end server, the virtual machine launcher transmits to the front-end server one or more virtual machine identifiers, wherein each one of the one or more virtual machine identifiers identifies one of the virtual machines with which the particular exercise is associated [paragraphs 0040-0049].

q. **Per claim 17,** *Alcorn et al* and *Johnston et al* teach the computer system of claim 16, *Johnston et al* further teach wherein the virtual machine launcher receives the identifier from a server running on a second computer system [paragraphs 0040-0045].

r. **Per claim 18,** *Alcorn et al* and *Johnston et al* teach the computer system of claim 17, *Johnston et al* further teach wherein, after determining the one or more virtual machines with which the identified exercise is associated, the virtual machine launcher transmits to the server one or more virtual machine identifiers, wherein each one of the one or more virtual machine identifiers identifies one of the determined virtual machines [paragraphs 0044-0048 and 0060-0064].

s. **Per claim 19,** *Alcorn et al* and *Johnston et al* teach the computer system of claim 18, *Johnston et al* further teach wherein, in response to receiving from the server an identifier that identifies one of the determined virtual machines, the virtual machine launcher brings into focus the window in which the identified virtual machine is running [paragraphs 0054-0056].

t.   **Per claim 20,** *Alcorn et al* and *Johnston et al* teach the computer system of claim 17, *Johnston et al* further teach further comprising a remote display server, wherein, after receiving a network address of a second computer system, the virtual machine launcher directs the remote display server to accept only connections that originate from that network address [paragraphs 0035-0036, 0043, 0048-0049 and 0070-0074].

u.   **Per claim 26,** *Alcorn et al* and *Johnston et al* teach the method of claim 1, *Johnston et al* further teach the method further comprising:

- receiving at the server data transmitted from the client system, wherein the data indicates that the student selected a particular exercise from the list [paragraphs 0036-0040 and 0065; server receives user's input selection of an exercise, wherein the server comprises identification for the variety of exercises accessible to the user];

- launching on a computer system that comprises a remote display server the one or more virtual machines that are associated with the particular exercise [paragraphs 0040-0050, 0055, 0065 and 0070-0074; after receiving instructions from the DLM, the DLU launches the virtual machines associated with the user's selected exercise]; and

- transmitting data to the client system, wherein the data directs the client system to establish a session with the remote display server, whereby the student is able to use the client system to remotely interact with at least one of the one or more virtual machines after the connection is established [paragraphs 0029-0035, 0039, 0048-0058 and 0070-0074; data is transmitted to the client system upon the establishment of a session connection with the virtual machines which facility a remote desktop for the user to interact with the virtual machines].

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Denious et al (6622003), Prahalad (2002/0072049), Richard et al (6162060) and (6149438), Strub et al (6652287), Hackney et al (2002/0065926).

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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